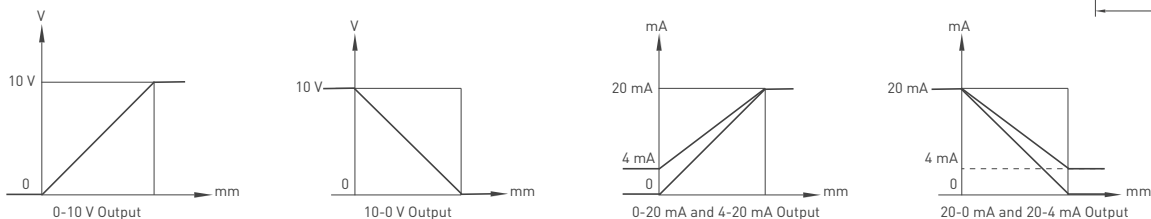
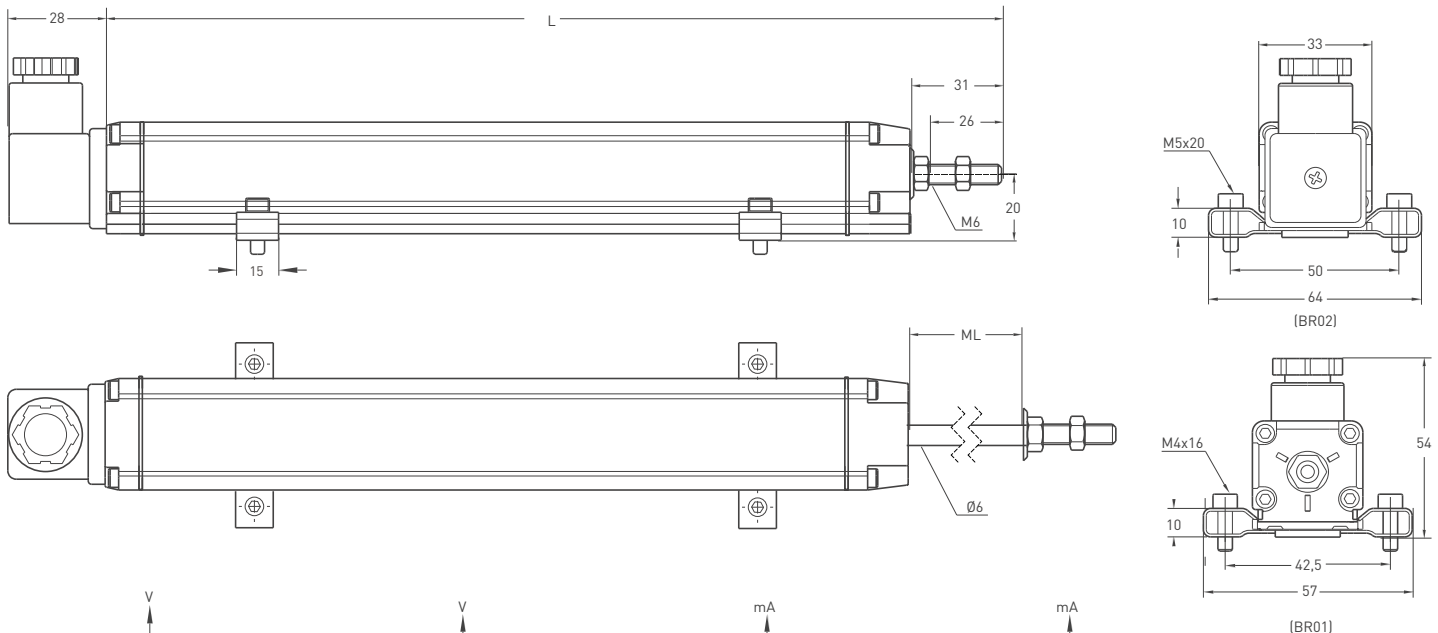


- Measuring length 50 - 1000 mm
- 16 bit resolution
- Excellent movement with ROD design
- Single - double output options



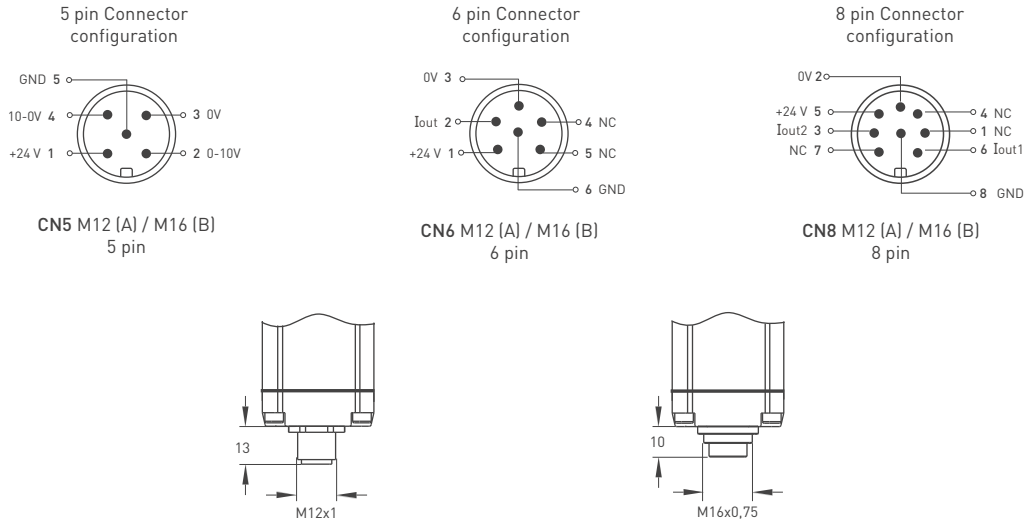
Technical Specifications	
Measurement stroke	50 to 1000 mm
Resolution	16 bit DAC output
Linearity	±0,05% full scale (min. 100 µm)
Repeatability	±0,005% (full scale)
Output	0-10V, 10-0V, 0-20 mA, 20-0 mA, 4-20 mA, 20-4 mA
Power supply	24 VDC ±10%
Displacement speed	max. < 5 m/s
Update time	(0-600mm, 0,5ms) , (601-1000mm, 1ms)
Max. consumption	50 mA - 90 mA (depending on stroke length)
Max. output noise	< 5 mVpp
Max. output value	10,5 V
Reverse polarity protection	Up to -30 VDC
Overvoltage protection	Up to +30 VDC
Vibration	EN 60068-2-6 , 5-200 Hz 200 m/s <sup>2</sup> (20g) , 2h 30min each axis (x,y,z)
Shock	EN 60068-2-2:2007 500 m/s <sup>2</sup> (50g) , 11ms. (x,y,z axis)
Case dimensions	33 mm x 33 mm
Case material	Anodized aluminium
Rod material	Stainless steel
Rod diameter	Ø6 mm
Mechanical fixing	Variable brackets
Protection level	IP 65
Operating temperature	-10°C ... +70°C
Storage temperature	-30°C ... +90°C

**Mechanical Specifications**

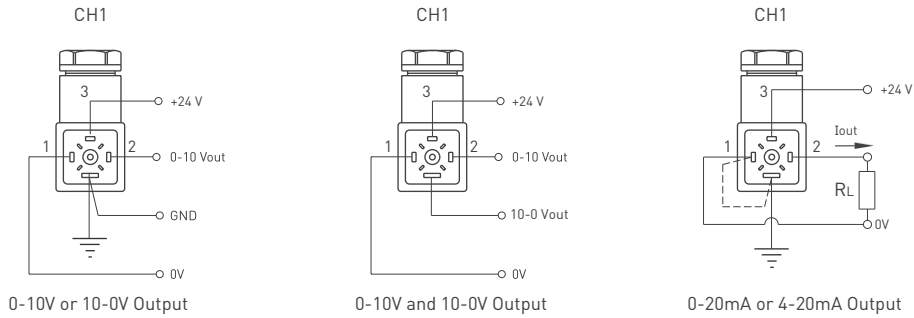


MSR [mm]	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	1000
ML [Measuring Length]	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	1000
L [Total Length]	280	330	380	430	480	530	580	630	680	730	780	830	880	930	980	1030	1080	1130	1230

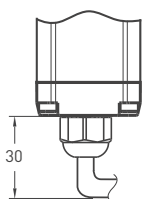
## Round Connector



## Hydraulic Type Connector



## Cable



### Voltage Output

+V : Brown  
 0V : Blue  
 0V Sense : Black  
 Output 1 : White (0-10V)  
 Output 2 : Orange (10-0V)  
 Earth : Shield

### Current Output

+V : Brown  
 0V : Blue  
 0V Sense : Black  
 Output 1 : White [Iout1]  
 Output 2 : Orange [Iout2]  
 Earth : Shield

### Cable Length

1M : 1 meter (standard)  
 [Different cable lengths available]

## Ordering Procedure

Model	Measurement stroke	Resolution	Output	Connector / Cable	Bracket
MSR	300	A	V10	CH1	BR02
MSR	50 - 1000 mm	A: 16 bit B: 15 bit C: 14 bit D: 13 bit E: 12 bit	V10 :0-10V I40 :4-20mA 2V10 :0-10V/0-10V 2I40 :4-20mA/4-20mA V01 :10-0V I04 :20-4mA 2V01 :10-0V/10-0V 2I04 :20-4mA/20-4mA V11 :0-10V/10-0V I41 :4-20mA/20-4mA V50 :0-5V I20 :0-20mA 2V50 :0-5V/0-5V 2I20 :0-20mA/0-20mA V05 :5-0V I02 :20-0mA 2V05 :5-0V/5-0V 2I02 :20-0mA/20-0mA V51 :0-5V/5-0V I21 :0-20mA/20-0mA	CH2: Hydraulic type (small) CN5A: M12 CN5B: M16 CN6A: M12 CN6B: M16 CN8A: M12 CN8B: M16 1M:1meter 2M5:2,5 meters	BR01 BR02